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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Alan Timothy Gibbs

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EXAMINER

VENNE, DANIEL V

ART UNIT

PAPER NUMBER

3617

NOTIFICATION DATE

DELIVERY MODE

09/22/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/554,178	Applicant(s) GIBBS, ALAN TIMOTHY	
	Examiner DANIEL V. VENNE	Art Unit 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,7,8,11,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7,8,11,13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>0</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. An amendment was received from applicant 8/4/2009.
2. Claims 1, 7, 13 and 14 are amended.
3. Claims 3, 5, 6, 9, 10, 12, 15 and 16 are canceled.
4. Claims 1, 2, 4, 7, 8, 11, 13 and 14 are remaining in the application.
5. The amendments to the specification are accepted.

Drawings

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recited vehicle with the planing hull, propulsion unit and retractable wheels must be shown or the feature(s) canceled from the claim(s). A portion of the marine propulsion unit and hull is shown; however, no retractable wheels are shown. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

Art Unit: 3617

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to under 37 CFR 1.83(a) because they fail to show wheel [15] as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 2, 4, 7, 8, 11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gere et al. (US 5590617), in view of Roycroft et al. (US 6796856 B2), and further in view of Caserta et al (US 5727494) and JPO 1030883, cited by applicant. Gere et al. discloses a planing hull [16], marine propulsion unit [54], a transversely mounted steering element having a rack (rack and pinion steering system with housing) [150, 152] with an actuating rod (control arm) mounted to a rack arm (ends of control arm) [154, 156] of a rack of the steering element and arranged for transverse movement (see Fig. 11), flexible coupling means (push-pull cable shown in Fig. 13) [176] connecting the actuating rod to a steerable part of a marine propulsion unit (the push-pull cable is connected to the marine propulsion unit and rack and pinion steering system), and wheel links [155, 157] arranged to fold upwards on retracting the wheels, as recited by applicant (Figs. 1-3, 6, 7-9, and 11-13). Gere et al. (in col. 12, lines 30-35 and Fig. 13) indicates that the cable [176] is mounted to the rack and pinion steering unit [152] and the marine drive steering gate [177] such that when the rack and pinion unit [152] moves in a side to side direction, the steering cable manipulates the steering gate to control the direction of thrust; although Gere et al. does not explicitly disclose how the push-pull cable is connected to the rack and pinion steering system, the

Art Unit: 3617

actuating rod is mounted to a rack arm of a steering rack and the push-pull cable [176] is at least indirectly connecting the actuating rod to a steerable part of the marine propulsion unit. Gere et al. does not disclose a power assisted steering element. Roycroft et al. discloses a power assisted steering element that includes a rack [132] and a hydraulic ram [134] and piston [135]. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide power assisted steering with Gere et al. similar to that of Roycroft et al. which would include a hydraulically powered element for a rack and pinion steering system, that would enable power assisted steering for the steering element of Gere et al. that would reduce the effort required to steer the vehicle by an operator. Gere et al. also does not explicitly disclose that the steering of the wheels and the marine propulsion unit steering are arranged to be operated simultaneously, although it appears from the disclosure that road and marine steering are capable of being operated simultaneously, at least during road use. Caserta et al. discloses an amphibious vehicle with wheels and marine propulsion unit steering arranged to be operated simultaneously, as claimed (See Fig. 9 and col. 2, lines 19-23). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide simultaneous wheel and marine propulsion unit steering with Gere et al in view of Roycroft et al., similar to that disclosed by Caserta et al., that would provide the expected results of improving upon the steering capability for the watercraft, especially during transition from marine mode to land mode of operation. The front two wheels appear supported

Art Unit: 3617

on independent relatively short axles (see Figs. 6 and 11) with each wheel arranged to be steered by means of the steering element as recited in claim 8. With respect to claims 11 and 14, the power assistance provided by the hydraulic powered rack and pinion steering system of the combination indicated above for steering of the front wheels of the vehicle would match the power assistance provided to steer the marine propulsion unit since the same steering element would provide power to steer the wheels and the marine propulsion unit; therefore, the power assistance would match that provided for the steering for the wheels and the marine propulsion; the power assistance applied for steering the marine propulsion unit during high speed would implicitly overcome any self-centering tendency of the marine propulsion unit. The references above, either alone or in combination, do not disclose wherein the flexible coupling means is a push pull cable that is coupled to the actuating rod through a bell crank means; however, JPO 1030883, cited by applicant discloses a rack and pinion steering system mounted transversely which steers front wheels and is connected to a steerable part rearward via bell crank means. Therefore, it would have been obvious to one of ordinary skill in the art to which the subject matter pertains to utilize the bell crank means disclosed by JPO 1030883 to create the invention as claimed by applicant. Such a combination described above uses known features to provide expected results.

Response to Arguments

10. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection presented above, which is based in part upon information provided in applicant's newly submitted information disclosure

statement (IDS) received on 8/4/2009. Although previously allowable subject matter was indicated in the previous office action, applicant's submittal of the new IDS above prompted the new grounds of rejection of this office action. This action is non-final.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel V. Venne whose telephone number is (571) 272-7947. The examiner can normally be reached between 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 3617

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (In USA or CANADA) or 571-272-1000.

DVV

/Lars A. Olson/
Primary Examiner, Art Unit 3617